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ABSTRACT

This booklet was produced by the Project to help day care centers make the best use of their outdoor play space for children. It gives the playground planner many helpful ideas and guidelines about equipment, arrangement, surfaces, long-range planning, play activity, community involvement, and the adult's role on the playground. Each of the States involved in the Southeastern Day Care Project developed its playground according to its own needs and resources, but certain overall purposes of the Project were considered. Centers were to be adequately equipped but not extravagantly, so that the programs would be replicable and could provide ideas for other programs. In addition, it was hoped that duplicating the traditional playground still found in many parks and schools could be avoided. (Author)

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PLANNING PLAYGROUNDS

FOR

DAY CARE

Southeastern Day Care Project
Southern Regional Education Board
130 Sixth Street, N.W.
Atlanta, Georgia 30313

November 1973

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INTRODUCTION

This booklet was produced by the Southeastern Day Care Project in an effort to help day care centers make the best use of their outdoor play space for children. It gives the playground planner many helpful ideas and guidelines about equipment, arrangement, surfaces, long-range planning, play activity, community involvement, and the adult's role on the playground. Since there seems to be relatively little written about planning playgrounds, we felt that some of our experiences might be helpful to others in developing outdoor space.

Each of the states involved in the Southeastern Day Care Project developed its playground according to its own needs and resources, but certain overall purposes of the project were considered. Centers were to be adequately equipped but not extravagantly, so that the programs would be replicable and could provide ideas for other programs. In addition, it was hoped that duplicating the traditional playground still found in many parks and schools could be avoided.

When Becky Cheek joined our staff as a project assistant, she expressed a long-time interest in playgrounds. This publication became a special assignment for her. She not only has done the writing but is also responsible for the photography.

The Southeastern Day Care Project has been supported by grants from the Donner Foundation and Title IV-A of the Social Security Act. States participating were Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina and Tennessee. The Southern Regional Education Board had responsibility for coordinating the project, providing training and assistance, and evaluating the program over the three-year period of the project.

NANCY E. TRAVIS, *Director*
Southeastern Day Care Project

A PLAYGROUND IS . . .

A playground is a place for a child to run, to leap, to shout, to climb, to splash, to find expression for his energy and ideas. In a day care program, the playground is particularly important, for it is as much of a learning environment as the indoor classroom. The day care playground should be used for much more than a respite from one's work or the traditional time for "recess."

If the goal of a day care program is to expand a child's experience, to provide a wide range of activities, to develop the total child, then the importance of the playground cannot be minimized. The young child is developing rapidly. He has special needs, some of which can be met better by outdoor activities and some of which can *only* be met outdoors. For large muscle development, a child needs plenty of room to tumble, jump and climb. Certain equipment simply is not suitable for indoors—tricycles, large climbers and swings, for instance. If the child is to master heights and overcome fears, he must have room to climb and jump in safety. Other activities are simply more practical outdoors; sand, mud and water play can be used with more freedom and abandon outside.

The outdoors gives a child a chance to expand his capacities and to meet new challenges. Some activities take on new dimensions when outdoors. For example, water play indoors is quite different from splashing and wading outdoors. And caring for a terrarium indoors is a completely different experience from growing vegetables outdoors.

The larger outdoor space expands the life space for each child, for it gives him many options—he can get away from the group, form his own group or play by himself. Opportunities for socialization are varied and take place more spontaneously.

Certainly there is something inherently healthy about the outdoors and being in touch with the innate pleasures of the outdoors. A young child who spends most of his daylight hours in a year-round program has a pressing need for outdoor activities. This is particularly true of children coming from a crowded, steel-and-brick urban environment.

The playgrounds in the Southeastern Day Care Project, (SDCP),[1] have provided ideal opportunities to study children's play and playgrounds. Designed and developed in many ways, the various playgrounds provide a wealth of experience from which to draw, ranging from developing the best "store-bought" playgrounds to letting the children build their own playgrounds from "junk." None claim to

Balancing on a walkway is a real challenge . . . and a triumph for this four year old.

be the ideal playground; each was faced with the reality of certain restrictions—the available site, limited funds, state licensing regulations, etc.

Much has been learned about designing and developing playgrounds, the advantages and disadvantages of different approaches, different equipment, physical requirements, and what role a teacher plays. The centers have learned what works, what doesn't, which problems have solutions, which ones are continual headaches. We wish to share these experiences with others in day care and with people involved in developing outdoor play spaces. The information gathered here is not "hard data," but rather insights and conclusions that come from observations and interviews with staff and program directors in the centers (whose playgrounds are still developing and changing). We hope that by sharing our experiences, we can help others make better, well-though-out decisions about developing outdoor space that will result in a richer play experience for children.

Developing new skills, sharing, and playing hide and seek are all part of the outdoor play experience.

CREATING THE PLAYGROUND

Anyone involved in planning a playground soon finds out that it is not as simple as "put the swings here, and the sandbox over there." With the profusion of playground equipment catalogs available, the idea of do-it-yourself sounding like fun, and the budget and regulations bringing one back to reality, the planner has much to consider in designing play space outdoors. Where to build the playground, what kind of surface to put in, what activities will be provided, who will use the playground, whether to purchase equipment or to build one's own equipment, what props and accessories will be needed, are all questions that need careful consideration.

The first questions that must be answered are *who plans the playground? Who builds it?* The following are three examples of how playgrounds can be created. These examples were not chosen because they are necessarily the best way to build a playground, but because each one demonstrates a different process. Each center faced different problems and found solutions in its own unique way.

A lemonade break for hard working parents.

The Parent-Staff Built Playground

The playground of the Donner-Belmont Day Care Center in Tennessee is not a work of art, but then it is not a junk-yard, either. The beauty of it is that it is a responsive environment for children; a safe but challenging place to play. It is really quite simple, consisting of a slide, sandbox, playhouse/storage unit, a cluster of wooden spools, crates, boards, barrels, sawhorses, a big swing, a tire swing, picnic tables, concrete sewer pipes, a stripped tree, wheel toys and an asphalt "trike" path. It is the result of the joint efforts of the Center staff and parents.

The staff of the Center decided they wanted a playground that could be built easily and inexpensively, where new ideas could be tried out. Everyone on the staff contributed to the design. The teachers and director had worked in other settings and had experience with different types of equipment and activities. The staff located most of the "equipment," then jointly decided where to put it.

Parents played an active role in the creation of the playground. As the director says, "Every time we saw a chance to involve the parents, we did." A concrete sewer pipe was donated, but help was needed in moving it to the playground. The call for help went out and was answered by a child's grandfather who volunteered his flat-bed truck and organized a group to move the pipe. One parent volunteered to build a playhouse/storage unit in order to encourage the idea that this would also be a "parents' playground." His idea caught on, and he was able to involve a number of other parents in the building of the playhouse, with the wholehearted approval of the day care staff.

The real parent involvement came during playground work days that were planned and organized by the parents' organization. "I can't hammer a nail for anything, but I sure make a good potato salad," said one mother. Everyone wanted to do something. It was a clear spring day and the sun was just beginning to warm things up when people started arriving on "work day." Some brought sandwiches and cake, others brought saws and hammers. A food committee planned the menu and served the lunch. Smaller children were cared for by the child care committee. The help of teen-age brothers and sisters, aunts and uncles, was enlisted. Everyone from children to grandparents made up the "muscle committee." On this particular work day, besides painting and repairing the playground, the playground itself was to be moved from one side of the street to the other — a move necessitated by the building of an interstate highway.

One parent was in charge of engineering the move, another provided a truck to move the larger pieces of equipment. Men brought ladders to hang the swing equipment from trees. Everyone helped transport the pea gravel in wagons and baskets, mix and pour the concrete, and repair and paint the equipment.

The time spent in involving the parents and in planning together paid off; the awkward task of moving the playground was completed in a day.

"Paint days" have since been a regular project of the parents' group. The director says, "They have been our best parents' project. The staff-and-parents exchange during those times is invaluable." She feels that one of the most important benefits of the playground project was that it brought the parents together and stimulated their involvement in all phases of the center's program.

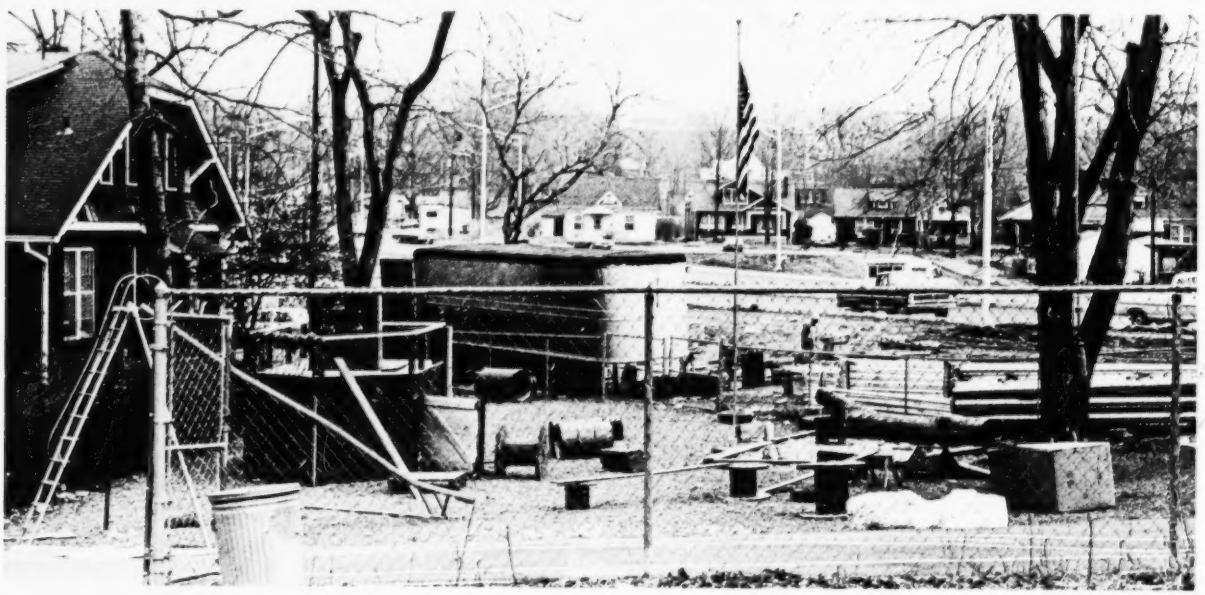
Conclusions

The Donner-Belmont playground was a success, particularly from the standpoint of parent involvement. But the playground didn't happen overnight. It was successful because:

1. Staff and parents worked together and were convinced they could build a good playground.
2. The parents were organized. A parents group was already formed and took the responsibility of forming committees and delegating responsibility.
3. Everyone was involved. Jobs were created so each person felt he was making a valuable contribution.
4. The rewards were immediate. The parents made a picnic out of a work day, and the work was finished in a day.

A parent makes a climber out of old tires.

A playground is created in the middle of an urban area.



The Professional Consultant-Built Playground

The playground at the Winchester Day Care Center in Monroe, North Carolina, is a series of platforms and tunnels, hiding places and hills, complete with sand area and fireman's pole. It was designed and built by playground professionals, staff and local citizens. Although it is a creative play environment and a notable achievement, this playground was not achieved without planning and working out solutions to problems.

The state project director was aware of the innovative playgrounds that professional playground consultants had designed and was impressed with the rich play environments they offered children. A consultant was contacted who agreed to conduct a workshop for the Winchester staff with a goal of developing a playground design. Since the Winchester Center is also a training site for other day care center staff, it was decided that the playground workshop could be not only for the Winchester staff but also for day care workers from twenty-five counties. They felt that since a playground professional was being brought in, the benefits of his expertise should be shared.

The two-day workshop began with the consultant showing slides of various playgrounds throughout the country to demonstrate the range of possibilities and innovations in playground design. As the participants discussed the playgrounds, they were encouraged to think about what activities should be provided and about the best use of the space. Brainstorming brought out numerous ideas that were discussed and fed into the final plans. By the end of the workshop, a rough design that took in all the aspects of good planning had been sketched and agreed upon.

There was some misunderstanding, however, as to what was to be the final outcome of the workshop. The Winchester Center staff had intended to come up with a specific plan for their playground, while the others were more interested in a playground design from a theoretical viewpoint. Differences were eventually worked out, but in retrospect, the director of the Winchester Center feels that it would have been better to have held separate sessions for the two groups.

The consultant had planned to have the designing and planning of the playground completed by noon so that construction could begin the same day while he would still be there to supervise it. But the staff wanted more time to think about the playground and to decide if the plan was what they really wanted. For most of the staff, this was a completely new approach to creating a playground and they needed time to think about the ideas.

The consultant had requested that certain materials and tools be available on the second day of the workshop so that construction could begin. But the center staff asked, "How do we know what materials we will need before we design the playground?" Consequently, materials were not there and the afternoon was spent in further planning and designing instead of construction.

On a Saturday four weeks after the workshop, the consultant returned to direct the construction activities. This time, twenty people — parents, day care staff and people in the community — worked for

eight hours on the playground. Volunteer help was enlisted from the Neighborhood Youth Corps and Explorer Scout Troops.

But the path was not always smooth. It took three more building sessions to finish, with two other young men hired as consultants to "bring the project through." There were misunderstandings about who was to do what and when. One parent's good will was thwarted when he arrived at the site with a truck of earthmoving equipment and two workers ready to donate their time and use of equipment. No one had told him the work session had been postponed.

Because consultants are usually from another city and come in only for a day or two at a time, they cannot be expected to identify available resources and organize the community. Consultants are often hard to reach, so that communicating about the details of getting labor and materials becomes difficult. A clear understanding between the consultants and the local staff on who has responsibility for initiating and following through on all steps of the entire project is an essential ingredient to integrating consultants, staff and community.

Despite the planning problems, the professional expertise certainly made for a well-built playground. The knowledge the consultant had of child development, how to scale play equipment for the appropriate ages, as well of his awareness of safety measures, was invaluable. He knew exactly what kind and grade of wood to use, how to specially treat it to withstand wear and weather, how to finish the edges and bolt pieces together to prevent nasty cuts or tears for playing children. This playground is extremely sturdy because the consultant made sure everything was well-anchored; he convinced everyone of the importance of "digging down so far." Very often groups use donated telephone poles, spools, and wooden crates — because these materials are free — without considering whether they are worth the risk of poor quality. The consultant knew how to check the telephone poles and treat them for use so that the dangers of harsh chemicals, stains and splinters were eliminated.

A number of positive spin-offs were generated by the Winchester Center experience. A ten minute film entitled *Playground* depicting the community-built playground process was produced. The workshop was certainly helpful and educational to all who attended. The people from the other counties were able to use many of the ideas at their own centers. Since the construction was completed, numerous groups have visited the Winchester site to get ideas and technical assistance for their own playgrounds.

The professional-built playground is a series of platforms, tunnels, hiding places, with sand area and pole.

Several centers have duplicated the playground almost exactly. Using the playground as a model and for training purposes is one justification of the cost.

Questions to be considered by planners interested in this approach are *what does a project like this cost? Is it worth it?* For the Winchester playground, less than $500 was spent for materials (not including the fence or jungle gym) and over $2,400 for consultant fees and labor.

If one has a limited budget, modification that would reduce the cost of this process is possible. A center committed to good community relations could put the money back into the community by hiring local labor. A center committed to parent involvement could easily involve the parents in such a project. It could even be the organizing project to get the parents' group off the ground. Many centers have exceptionally good luck in finding valuable resource people among parents and in the community; while they are not experts, they are knowledgeable as well as supportive.

Although the Winchester Center ended up with an exceptional playground, it is necessary to question what they may have lost in terms of tapping local resources. The consultants provided a good design and contributed their know-how about building, but they did not bring with them the communication and organization skills necessary to make the project a success in terms of community and parent involvement. The state project director felt that the consultants ". . . make it look so simple. In two days they say 'we'll plan and build a playground.' But it takes commitment and lots of hard labor."

In weighing the benefits of using professional consultants for designing and building a playground, the staff should first examine the material available about playgrounds. Such a survey may produce ideas and designs that would be adaptable to the local need. There are several excellent "how-to" publications[2] for specific pieces of equipment that can be built locally. There may be individuals in the community who have knowledge and expertise on playgrounds. If their help is enlisted, a long-term resource for advice and follow-through is created For example, one center enlisted the help of a landscape architect to help develop the playground. This approach draws directly from the community and parents for their involvement and help.

Conclusions

It should not be implied that the "professional consultant-built playground" is necessarily difficult or undesirable, but it should be pointed out that preplanning and timing are very important in order to make the best use of consultants. The story of the planning and construction of the Winchester Center playground was a learning experience from which others can benefit, for it demonstrates the need to:

1. Involve staff, parents and others who will be asked to contribute time and work in planning and designing the playground. Include as many of their ideas as possible, because this makes for a better commitment to the success of the project.
2. Give the planners time to think about the ideas and design presented by the consultant so that they can be sure it is what they want and that it is appropriate for the center for which it is designed.
3. Advance planning and pinpointing responsibility for coordinating men, materials and consultants is important so that maximum work may be accomplished in minimum time.

The Child-Built Playground

This example of how a playground can be designed and built is probably the most radical departure from the ready-made, catalog-inspired playground. This playground demonstrates the ingenuity and imagination that children are capable of, for it was planned and built by children, with the leadership of adults.

The school-age children at the Donner-Belmont Center in Tennessee had no place to play. When the housing authority offered the use of some land to the Center, one of the staff suggested that the children build their own playground. She told them that she thought it would be fun and that she was going to start on it. It didn't take much to get the children involved after that. One day care worker reports, "After several days, the kids loved it and you couldn't hold them back."

The adults refrained from making suggestions of their own but tried to stimulate the children to think of ideas for the playground. "Then we tried to implement their suggestions so the ideas really did come from the children!"

And what ideas they had! The children took full advantage of the trees. One tree was the "music tree," complete with hub-caps, pipes and cans, all sorts of "chimes" hanging from the limbs, that the children "played." Another favorite spot was the "whispering tree." The children would sit on its low wide branches, enclosed in lush greenery, and read stories or just "whisper." One tree had a particularly strong branch that was horizontal and long enough to hang an array of climbing and swinging apparatus — a punching bag, a trapeze made of chain and pipe, tire swings and climbing chains (which were discarded tire chains). A slide was built into one tree, with slats up one side for climbing and a metal slide attached to the fork in the tree.

Even trees without strong, extended branches were used. A large cargo net was hung between two birch trees, and the children loved to climb on the net and sing and sway together.

In building the playground, the children literally became scavengers, using anything they could find. A picket fence became a zig-zag fort. A length of thin plywood was mounted on two trees and used as a long easel.

In addition to providing ideas, the children were responsible for the manpower needed to haul things to the site. They went to the railroad yard and helped to load ties which they used to build a sandbox. Used tires were picked up from a tire company. They got cable spools from an electrical company. The telephone company donated and delivered the telephone pole that the children set up on blocks and used as a balance or a sitting beam.

After the "equipment" started accumulating on the site, and the playground started taking shape, the children were faced with the problem of vandalism. Spools would be rolled away, tires stolen, swings cut down — but their spirit could not be broken. With some help, they set the spools in concrete. They drove pipes through the tires and nailed chains into the tree to secure the swings. The spools, grouped together, were used for art activity, table games or for a place to eat. Stacked on top of one another, the tires were used to climb on.

The site was where three houses had been torn down, although concrete surfaces remained and a garage was left intact. The children used the concrete surfaces to play jump-rope or hop-scotch, and the garage provided a storage area for equipment and art supplies.

In addition to being rich with trees, the site was grassy and had several open spaces. There was plenty of space for group sports, the biggest deficiency of most day care playgrounds. A basketball hoop was set up, a tetherball installed. There was space for a badminton set to be put up. A small baseball diamond enabled the children to play their favorite game, kick-ball.

The problem with vandalism was a regular one, although it diminished some after the children from the Donner-Belmont center spoke with the children in the neighborhood about using the playground. They explained that they didn't mind anyone else using it as long as it was free when they needed it.

After that, the other children helped keep up the playground, reporting any incidence of "older children fooling around there." When there was an act of vandalism, the day care worker reports that the children would get disgusted but wouldn't give up.

"The children were very proud of their playground," reports a teacher. "When parents came to pick them up at the playground, the children would beg them to stay and play for a while." This lasted for over six months. In the fall, the playground was vandalized beyond repair. But school was starting and because of busing, the children got to the center so late that there was little time to use the playground. Since they would have had to dismantle it in a few months anyway, it was decided not to rebuild. While it was there, it was, as one child put it, "the best place in the whole wide world."

Conclusions

The actual building of this playground gave the children as much satisfaction as the end product. This playground got off to a terrific start, but had a short life. Several lessons were learned in the success and failure of this process:

1. If the playground is open to the community, equipment should be secured.
2. Building good relations with other children using the playground diminishes vandalism problems and may produce an agreeable arrangement for sharing the playground.
3. Continue to add on to the playground. That's half the fun.
4. Adults play a vital role. They should stimulate and encourage ideas and then let the children take the lead.

Summary

What conclusions can be drawn from the experiences of the parent-built, the consultant-built, and the child-built playground? None of them provide a formula that would be appropriate for all conditions. In fact they demonstrate that building one's own playground is not as simple as it may seem. In all three playground projects, careful planning and good organization were the keys to complete success. There is no substitute for the strong leadership that gave several of the projects their direction and inspiration. Commitment and agreement from the day care staff are extremely important ingredients. At all times, it is necessary that the people involved be clear on the purpose and goal of their efforts, or else confusion exists and good intentions are thwarted. Regardless of what method is used, one should not overlook the importance of making the project fun. Having lunch and refreshments and providing activities for the children not only allow more people to participate, but make the work enjoyable.

Parents built this walkway from discarded cable spools and telephone poles.

THE PLAYGROUND SITE

The playground site must meet certain requirements before the playground is built. These considerations are a necessary part of good planning. Licensing standards for day care centers usually set minimum safety standards for outdoor space and equipment, and the standards vary from state to state. Some also specify types of equipment, surfaces, activities, etc. Before organizing the space and planning activities, the planner would he wise to learn what the licensing requirements are.

Space requirements range from 40 to 150 square feet per child, with 75 being fairly standard (although preferred recommendations are 200 to 300 square feet per child). Some states specify that the playground must be adjacent to the center.

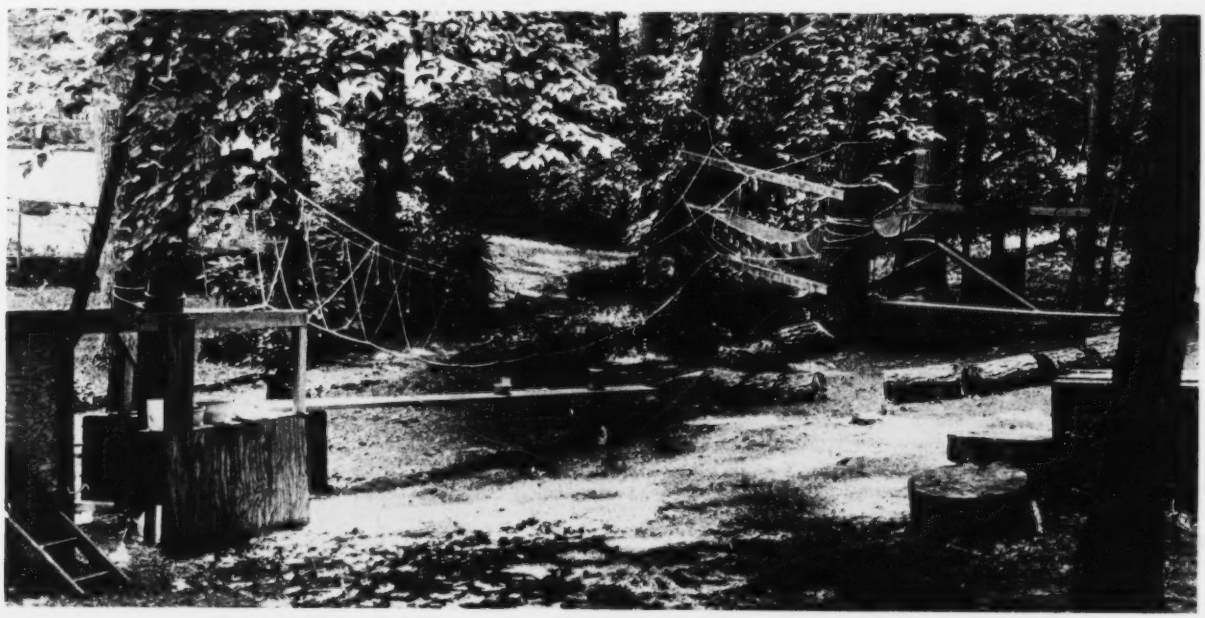
Fencing standards vary from stating both the height and type of fence required to suggesting that fences are desirable only if the play area is near a highway or on a roof. It is generally felt that a fence is desirable to provide both a physical and psychological boundary for children and that gates should be wide enough for delivery trucks or earth-moving equipment to get through. Hedges or other natural barriers are sometimes sufficient. A fence should be adequately budgeted for, as it is usually a big expenditure. SDCP centers have spent from $490 to $1,100 for fences. One center, knowing their playground would eventually have to be moved to another site, negotiated the cost of installation to include moving the fence. Foresight at the planning stage can be a real savings later.

In selecting a site, avoid obvious hazards such as deep pools, holes, drainage ditches. Garbage pails, heating and air-conditioning units should be covered. If there is to be a water fountain or an electric outlet, provision must be made for them at the very beginning.

To provide both sunny and shady areas, the planner needs to incorporate trees or other available structures (awnings, covered walkways, etc.) in the initial planning. It is possible to build or add structures that provide shade; umbrellas, open-air awnings, gazebos and other pavillion-like structures are possibilities. These, too, are best made part of the original plan.

Check list

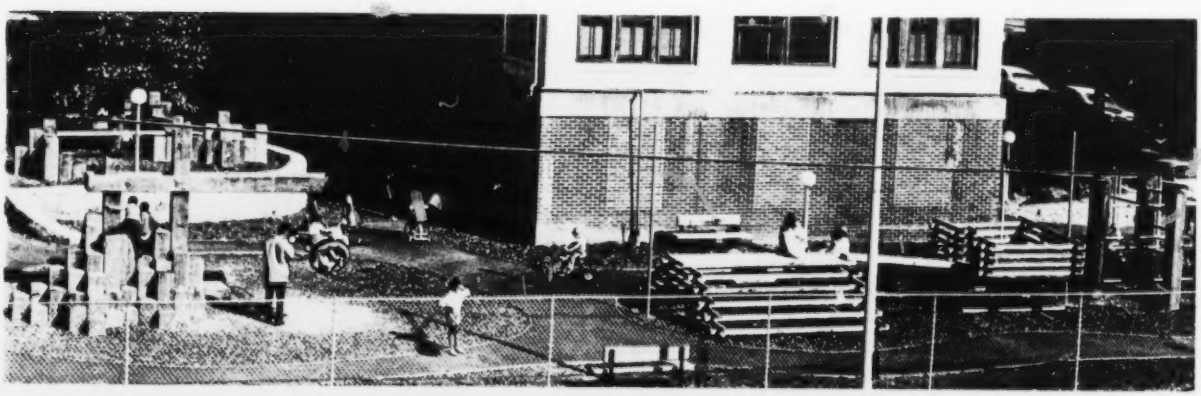
- Develop a long-range plan.
- Meet licensing standards.
- Remove obvious hazards.
- Allow for adequate space for each child.
- Incorporate any trees or bushes.
- Install fence or some form of boundary.
- Install water fountain and electric outlet.



Choosing a site with trees is the first step in creating an intriguing playground

ORGANIZING PLAYGROUND ACTIVITIES AND SPACE

Space communicates with people—in a very real sense it tells us how to act and how not to act. What it tells us to do is related to what is in the space and how these things are arranged or organized.—Kritchevsky and Prescott, *Planning Environments for Young Children*



Placement of equipment is often determined by what piece of equipment arrives first. Arranging for specific activities is even more haphazard. What factors should be considered in organizing playground space and activities?

Before permanently installing any piece of playground equipment, care should be taken that the best spot has been chosen, the scale is appropriate, children can be supervised easily, and changes can still be made in the rest of the playground. The direction of the sun should also be considered in order to place equipment to its best advantage. For example, placing a metal slide in the shade or facing north will minimize the problem of "hot seats." Sand is best placed in an area that gets direct sun for at least several hours a day to enable it to dry out.

In organizing the playground, it is important to provide for clear paths and adequate empty space. The way to test for clear paths is to ask *how do children get from one place to another?* If the planner looks at a projected play area and cannot readily answer this question, the children probably can't, either. When a path is unclear, there is interference with a child's ability to see, move to or stay with a play activity. It is suggested that the planner himself kneel down and place his eyes at the child's level so that he can better see just where and how clear the path really is.

Empty or open space is necessary to accommodate the enormous amount of active play. Active play takes about three times as much space as passive play.[3] There must be enough space for building, running, splashing, or whatever activity is taking place, as well as sufficient space to separate it from other activities.

Another aspect of good organization and planning is ease of movement through the playground. The range of no less than one-third to no more than one-half free or open surface is necessary for good organization.[4]

Intensive research by the Pacific Oaks faculty[5] has identified specific factors to be used as guides for planning physical space. The first factor to consider in planning a playground is *variety.* How many different activities are provided for? How many different kinds of equipment are there? What different types of play space are available — active, passive, enclosed, open? Will the space interest a child? Planning for variety insures that a child has an interesting choice and that there will be plenty of opportunities for play.

The second factor is *complexity,* a difficult but extremely important factor to assess. It is the "measure of the potential for active manipulation and alteration by children" — that is, how much effect, how much control, can a child exert on his play environment? Simple (as opposed to complex) play equipment or simple play space is that which has one obvious use and does not have sub-parts or anything that a child can change or control. Examples of simple equipment are swings, jungle gyms, spring toys and play sculptures. A complex play unit has sub-parts, or different play materials, that the child can manipulate or improvise with. Examples are sandboxes with digging equipment and playhouses with props or dress-up clothes that allow a child to

build, rearrange his world and create new ones. Interest increases when additional materials and props are added — adding water to sand, a tunnel through an existing hill, or movable climbing boards or crates, for instance. Props such as steering wheels, water hoses and tires have been used in surprising ways. One center put a tree-trunk on a playground which stimulated a variety of activities. Children fastidiously peeled the tree over a period of several weeks, and then used it as a bench, a fort, a ship, etc.

Planning for variety and complexity on the playground expands the possibilities for play for more children. The rewards are that children are continually challenged and stimulated; they learn to mold, manipulate and change their environment. A play space that is continually interesting, that provides new opportunities, is a real learning environment and a real asset to a day care program.

Check list

- Carefully consider permanent placement of the equipment.
- Consider the direction of the sun.
- Direct the flow of activities.
- Provide clear paths.
- Check for ease of movement.
- Plan for variety and complexity.

This sand box is designed to encourage socialization and to discourage disruptions.

LANDSCAPING AND GRADING

If you want to do something good for a child . . . give him an environment where he can touch things as much as he wants.—Buckminster Fuller

If every child had strong, willing trees to climb, full bushes in which to hide, hills to run up and down, there might not be a need for playgrounds. Playgrounds incorporate the activities a child could engage in if he lived in the country; there are things to climb on, and places to hide, but planners often forget a child's joy in the other pleasures of the outdoors.

Trees provide shade as well as limbs to swing on and climb. Trees and bushes define boundaries, provide enclosed quiet areas to play, and create mysterious places to explore. Gardens are a natural outdoor laboratory to study how things grow. And all of it — trees, bushes, and flowers — provide a sensory experience not to be duplicated by any man-made environment.

Trees and bushes can be used to clearly define areas and direct the flow of activities. An area surrounded by trees or enclosed by bushes is a clearly-defined area, and children recognize it as such. A child knows how far he can stray and what area is *his*. A child has no problem identifying a direct path to an activity when a tree provides a highly visible marker. Art activities, story reading and dramatic play are better located in the shade and shelter of a tree. Other activities such as sand or water play are better placed where falling leaves and too much shade (direct sun keeps the sandbox dry and sanitized) are not drawbacks.

In choosing a play space, existing trees and bushes should be a major consideration, and should be incorporated whenever possible. The child-built playground in Tennessee is an excellent example of the advantages of trees and how slides, swings, and cargo nets can be combined with trees to add infinite variety and intriguing complexity.

Young saplings often have a difficult time if children play around them or try to swing on them. It is necessary to protect them with a wire mesh or a fence. Even full grown trees need to be protected. At one center a hill was paved and no space was left around the tree. The tree will eventually die. Filling in a space around the tree with brick and sand or building a platform or grill around the tree would have saved the tree. Another center was planning to build a tree house but realized that to leave enough space for the tree to grow would also leave a space just large enough for a toddler's leg to get caught.

Picking flowers, even if they are only weeds and leaves, is an activity enjoyed by children of any age.

There were several alternative solutions. The one they chose was to build a "treeless treehouse," a gazebo structure that served the same purpose but left the trees free. Another solution would have been to build a series of connecting decks or a fenced walkway surrounding the tree but several feet from the trunk.

Centers in Alabama and Mississippi have playgrounds that are veritable Gardens of Eden. Peach trees, pecan trees, magnolias, fig trees abound. The children in these centers pick fruit and pecans that they later enjoy at mealtime. Both programs move their activities outdoors whenever possible including lunch and naps to take advantage of the lush greenery.

One of the best ways to teach children about growing things is to let them grow something of their own. With a minimum of supervision children become proficient gardeners, enjoying the digging, planting and most of all the waiting and watching. Gardens need to be out of the way or protected so children do not inadvertently walk through them.

Hills and mounds are other natural forms that can add tremendously to a playground. Different levels provide places to run up, roll down, leap across, or simply a protected place to put a sand pit or a pool. It is important, though, that there be adequate space around the hill so that the child doesn't run into a swing or crash through someone's sand castle.

Smaller grass-covered mounds are particularly good for infants. On a gentle slope a child does not balance precariously on the edge or fall off.

Mounds and hills can be used in conjunction with other equipment. Slides can be mounted on the side of the slope so that in place of a ladder, the children can climb up the side of the hill; if they take a tumble, they only roll down the hill instead of falling from a height. Cross pieces can be used to connect hills and to provide an interesting and challenging climbing unit.

Trees, earth-shaping and grading are necessarily a part of the original planning, not just an afterthought or an extra touch. Trees and bushes can make the playground, just as the lack of trees and the barrenness of the landscape can detract. The lack of shade and nooks to explore can be a deficiency in an otherwise well-planned playground.

Check list

- Use trees and bushes to define boundaries and to expand play opportunities.
- Make use of and protect existing trees and bushes.
- Continue to plant new trees and shrubs.
- Develop hills and mounds.
- Provide a protected space for gardens.

Children play on, over and under this man-made dirt hill.

The "Treeless Treehouse"

WHAT KIND OF SURFACE?

The surface of a play area is like a signpost. It can give directions or designate a certain activity. A path is clearly marked by asphalt or cobblestones. Open grassy areas invite running and game-playing. Sand stimulates digging and building. Likewise, different activities require different surfaces. For instance, a hard surface is needed for cycling, whereas a resilient surface is desirable under climbing pieces and under a "jumping off" area. The decision about surfaces and where to put them is also a decision about how the playground will be organized, where certain activities will take place and how children will get from one area of activity to the next.

Concrete and asphalt are ideal for riding wheel toys, and they have the advantage of drying quickly. Since wheel toys are a favorite with children, a clearly defined "trike" path is also desirable. A path that winds around, even going up and down a hill or through a tunnel, will provide a much more interesting route than a circle or square. A trike path, whether concrete or asphalt, should be level with the ground so that children don't trip over it. A center that serves infants might want to build a trike path wide enough to accommodate a double stroller comfortably.

In one center, an asphalt surface provided not only a trike path, but solved another problem. The area paved was the side and top of a small hill. The site of the playground was where housing had been

Sand makes a resilient surface under a jumping-off area.

A trike path is painted on the asphalt surface.

torn down and children kept finding glass, nails, rocks and other debris. The side of the hill, being loose fill, was starting to wash away, and paving it proved to be a good solution. The center is pleased with the asphalt surface because at the top is a flat area used for riding trikes, (painted lines and arrows designate "roads"), the hill that the children like to run up and down on is retained, and the paved section adds surface variety to the playground.

A drawback of paving is that a large expanse of concrete or asphalt can be uninviting. Not only can concrete be harsh and sterile looking, but is unforgiving to the child who takes a spill. Also, the cost of paving is prohibitive to some day care programs.

An ideal surface is grass, but in a well-traveled area, grass is usually reduced to mud. But mud should not be discounted as a surface. A surface of mud can be satisfactory because it is more resilient than concrete and offers a variety of play opportunities. Mud or dirt permits children to play at digging big holes, building "roads" or filling up holes with water. When dry, mud is usually hard enough to ride tricycles on. The disadvantage of a mud surface is that it takes much longer to dry after a rain, consequently it cannot be used as much. In Florida, however, the soil has so much sand in it that it dries very quickly after a shower.

There is the problem that children do get dirty playing and rolling in the mud (although this is usually more of a problem for the adult than the child). But children get dirty just about anywhere they play, and it is often more desirable to clean up the child than to inhibit his activities.

In one center a surface of pea gravel has proven most satisfactory. The center director feels that the advantages far outweigh the disadvantage of children throwing the gravel. "You teach children not to throw gravel just as you teach them not to throw sand," the staff agrees and adds that any problems are overcome in a week's time, particularly when the children help make the rule of "no throwing stones."

The director prefers pea gravel for several reasons. "Children use it as a learning medium. They will sit and pour it back and forth in different containers. They will make a game of looking for shells in it. They bulldoze it, pile and rearrange it in different ways. We regularly involve the children in raking the gravel in place."

Before the pea gravel was poured, a sheet of polyethylene plastic was laid down to prevent weeds or grass from growing up. The edges of the plastic eventually work themselves up through the gravel, but the staff says that only visitors are bothered by

The edges of the polyethylene plastic work themselves up through the pea gravel.

Children learn in an environment they can shovel and have an effect upon.

the unsightly appearance. Another drawback is that the staff finds the gravel hard on their shoes, but they say they are willing to endure what they consider to be only a minor inconvenience. Several have solved the problem by changing into tennis shoes when they go outside.

A big advantage of pea gravel is that when a child falls, the chances of injury are diminished. The director says that the pea gravel is so resilient, so smooth, that the children don't even get skinned knees. Another advantage of pea gravel is that it dries quickly after a rain.

Other surfaces have been used successfully. A layer of wood chips (often obtained free from some power companies) provides a soft surface that dries quickly. A surface composed of steam-cleaned cinders and peat moss, when mixed mechancially and rammed into place, become a resilient surface of an attractive brown color.

Sand provides an excellent surface as long as it is free from oil. And it is an ideal learning medium. Take care to select a heavy grade of sand and place it in an area protected from strong winds to diminish the problem of blowing sand.

Other surfaces such as outdoor carpet, artificial turf, and surfaces made of rubber are being developed and used with relative success.

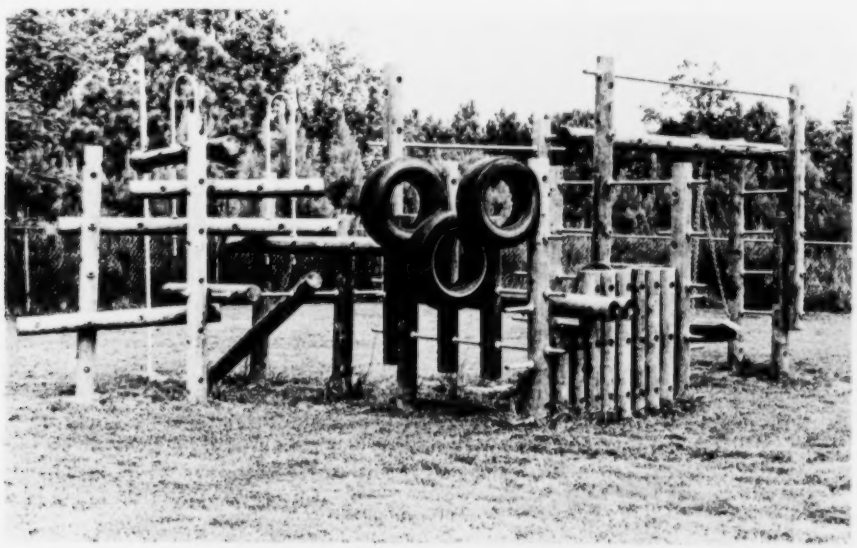
The best solution to the problem of surface is probably a combination of surfaces. Asphalt for trike paths, sand under climbing pieces, grass in open areas, gravel along paths or around equipment. Variety is desirable for both practical reasons and aesthetics. Different textures offer the child a variety of sensory experiences.

Whatever the surface, the drainage should be good so the surface dries quickly. As one playground expert says, "Any puddles should be designed ones." Professional help is often necessary to insure good drainage. Incorrect grading or lack of sufficient fill can later be the curse of an otherwise well-designed playground.

Another point to keep in mind is that surfaces dry at different rates, even if adequately drained. In *Pattern for Designing Children's Centers,* Fred Osmon offers this suggestion on the placement of surfaces, "To allow use soon after the snow melts or the rain stops, the fastest-drying surface should be placed near the exits from the indoor play environment and the semi-shelter and the slow-drying surface farther away. This would place asphalt, concrete, brick or stone paving adjacent to the exits, tanbark and sawdust in the middle, and grass and dirt farthest away. This placement of grass would also aid young grass as it comes up in the spring."[6]

Check list

- Insure good drainage.
- Provide a surface appropriate to the activity.
- Provide a variety of surfaces.
- Plan faster drying surfaces closest to the building and slowest ones farther out.



Grass is an ideal surface under this multi-purpose play unit.

WHO WILL USE THE PLAYGROUND?

Children of different ages have different needs, capacities and taste for challenge. If a program is for children of both pre-school and school age, where do they play? Is there a need for separate facilities? Do they play together or apart?

Day care centers have had varied success in accommodating the different needs of children on one playground. In one center, the program was originally planned for pre-schoolers, and the playground was built with this age group in mind. In order to accommodate the day care needs of the entire family, a school age program was added. The staff believes in the benefits of multi-age grouping, but also realizes that separating ages often better meets the children's needs. They tried it both ways.

When grouped with the pre-schoolers, the school age children's play was so rough and boisterous that it interfered with the younger group's play. Even when the groups used the playground at different times, there were problems; the older group quickly wore the playground equipment down with their added weight and more vigorous play. It was feared that soon the playground would be unsuitable for any age.

Intentional destructiveness was also a problem. This is a widespread problem and it is a typical reaction when a child's needs are not being met, or when a child is bored. When children play, they test their physical prowess as well as their imagination. A challenge to a four-year-old may be an utter bore to a ten-year-old.

The problem was solved when land was made available and the school age children built their own playground. Boredom turned to involvement, destructiveness to creativity.

A similar problem of inadequate space for the older children existed in another center. The school age program was small and initially for siblings of children in the pre-school program. The question arose that if the school age program is only for a few hours, can the sizeable investment needed to build a suitable play space be justified in light of the other financial priorities? Taking advantage of neighborhood resources and facilities proved an adequate solution. The school age group visited nearby parks and recreation centers or "stayed on the move" with various field trips. They installed basketball equipment on an asphalt area adjacent to the center, which provided another outlet.

One center is fortunate to have enough space to provide separate areas for the school and pre-school

In some cases older children play well with younger ones.

Older children's play can ruin equipment for smaller ones.

children (although the pre-school equipment was built to withstand the extra wear and tear of the older group). The director of the program has recently ordered some equipment that both age groups will be able to play on.

Growing with the Child

It is important for a playground to be designed for the age group that will be using it, in order to serve the child's specific needs and capacities best. But what happens as the children grow older and develop different needs and abilities? Can a playground grow with the children it serves? Ideally, a playground should be open to change, to adapt to new ideas, and most of all to respond to a changing population.

When one program began, it served infants. As the children grew, the interest in the challenge of the "baby playground" waned. The director found that she had to continually add new equipment to keep up with the rapid development and changing needs of the children.

Centers should anticipate the need to update their playgrounds. New equipment or props should be a regular, yearly budgeted expenditure. One center has, by plan, added new pieces slowly, one piece at a time, and discarded ones that no longer interested the children.

A benefit of multi-age grouping—a chance to be a big brother.

Serving the Community

The question often comes up of whether to let the neighborhood children use the playground when the center is closed in the evenings, weekends or holidays. Most licensing regulations prohibit its use by children not in the program during center hours, but many centers strive to serve the community in any way possible.

In the case of one center, there was no question. The center is located in a housing project where there were inadequate play facilities. Not to allow the other children to use the play equipment would not only have been unfair to the children, but unwise from the standpoint that hostility and vandalism would have been inevitable. With this in mind, equipment was chosen that was durable, suitable for many ages and could tolerate a large number of children at a time. The result of this arrangement is that the day care center really is a service to the community. The director has had considerable communication with the community to make sure they realize the playground is theirs. Vandalism occurred initially but has nearly disappeared.

Another center has had similar success in opening their playground to the community. The only problem was that at first the equipment kept getting moved around or even rolled away. Securing the equipment permanently to the ground solved this problem. The director says that the playground was built to accommodate 75 children and that it is in fact doing this and holding up well.

If a program decides to open the playground to the community, it must weigh the expense of added wear and tear against the enhanced community relations and services provided, and decide whether a playground open to the community is a luxury or a necessity.

Check list

- If outdoor space is to be used by children of different ages, take care to meet varying needs and capacities.
- Consider scale and durability of equipment.
- If playground is to be shared with the community, build it to withstand heavy wear.
- Take special care to protect landscaping and gardens.
- Seek community cooperation in creating and maintaining the playground.

CHOOSING PLAYGROUND EQUIPMENT

From merry-go-rounds to molded concrete sculpture, playground equipment comes in all sizes, shapes and colors. How does one choose? Are there disadvantages of traditional equipment? Does more modern equipment have any real advantage? Homemade or manufactured, which is best? Permanent or portable, how does one decide?

Traditional or Modern?

Traditional equipment is what most people think of when they think of a playground — swings, slides, merry-go-rounds, jungle gyms, see-saws, usually made of metal and set in concrete. There is a drawback, though, to traditional equipment — it does not allow for the lively imaginations of children and does not take into account the fact that children will find more ways than one to use a piece of play equipment. For instance, on a slide, children will slide backwards, head first, on the stomach, or standing up. They will climb the ladder or jump from the top. A play piece can be dangerous when a child uses it for something other than what the designer intended for it. Restricting a child's play or imposing too many rules inhibits or stifles his imagination.

Uncontrollable and unpredictable movement is another disadvantage of traditional equipment. Anyone who has watched children swing is aware of the dangers of flying, uncontrollable swings, particularly the kind made of metal or wood. Cuts and bruises are common. Because a swing is difficult to control, and its height is difficult to judge, accidents occur when children try to stop or jump out of the swings, or when younger children walk too close.

Another disadvantage of some traditional equipment is that children have to stand in line to take turns. Waiting one's turn and sharing are concepts that are just developing in young children and they cannot be expected to use much patience. Some feel that standing in line, at any age, is prohibitive to spontaneity and freedom in playing.

Traditional equipment generally needs more space which poses a problem. Adequate space must be allowed around the equipment as well as plenty of room between.

Traditional equipment first appeared around the turn of the century when the industrial revolution brought families from the farms to the city and the children no longer had wide open spaces to play in. Little had changed, though, in the way of playgrounds, until around the 1950's when people got caught up in the new space age. A proliferation of rocket ships, flying saucers and jet planes began to appear on the nation's playgrounds. Animals, Mother Goose characters, clowns, and peppermint stripes soon changed playgrounds into a fantasy land — or at least an adult's idea of such a place — without changing the basic function. In the sixties, educators such as Lady Allen Hurtwood, architects such as F. Paul Friedberg, David Aaron, and Richard Dattner, called attention to the "disaster areas" we called playgrounds and offered alternative solutions. New equipment appeared on the scene, from modular "Lincoln-log" climbing units to bold, abstract concrete forms.

There are several differences between traditional and modern equipment. Modern equipment is usually more abstract and non-specific. In most cases, the equipment does not move, instead the children do. Modern equipment is designed for more than a single, one-dimensional activity. Friedberg, a leader in the playground design movement, discusses this aspect. "To question stereotyped playground equipment is not to deny the activities provided by them; the swinging, sliding, and balancing they

Children find more than one way to use a slide.

provide are natural loves of every child. The challenge is to provide these activities in a way that does not automatically set up a single, predetermined and limited pattern."[7]

A number of playground manufacturers have taken up the challenge and are experimenting with all sorts of free-form climbing units, multi-directional swings, slides as part of larger climbing units, etc. More than one day care director has found the modern equipment very satisfactory. "There is so much the children can do on it. It really keeps them busy. The versatility has proved a real asset."

Something should be said about a style of manufactured equipment that falls somewhere between the traditional and modern — the rocketships, animals, fire trucks, clowns — the list is endless. Several playground experts view this line of equipment as just the other extreme of the level asphalt type of playground with fixed gray metal equipment. They describe it as "over-elaborate, over-clever, too slick, the pride of the architects."[8] Friedberg has found in his experience that "novelty in itself has little lasting attraction; the painted fire engines and ingenious play sculpture are pleasant enough and have reasonable play value, for a short time. But they ultimately have no lasting play value for the normal child with a lively imagination and short attention span."[9] Others argue that the play equipment is so explicit it stifles the imagination. One day care director said her experience with this sort of equipment has been that ". . . it does not lend itself to being anything but what it is supposed to be. A child is not encouraged to pretend that a rocket ship is a castle, a crow's peak or a fort when it is very precisely a rocket ship."

When children have a choice between the modern, non-specific equipment or traditional equipment, which one do they choose? One center had the opportunity to test this question. Children had the choice of playing on the spring toys, teetertotters or S-shaped climbing bar on the "tot lot" adjacent to the center (installed by the city) or they could play on their own free-form playground. They chose the latter. The children seemed to get tired of the spring toys very quickly, the director said. Because of the frequent accidents the children had on the teetertotters, the staff let the children play on them only with close supervision. No one uses the climber — it is too big for young children even though the playground was "scaled for tots." Also, because the equipment is metal, the hot sun often precludes any play on it until later afternoon when it is shaded by the buildings.

Homemade or Manufactured?

Another decision to make in choosing playground equipment is between ready-made, manufactured equipment and homemade equipment; that is, equipment made locally by someone, whether by parents, staff, a hired carpenter or an adept janitor. This includes using discarded structures or salvaged junk, electric cable spools, telephone poles, crates, tires — just about anything that can't be ordered from a catalog.

Programs that have built their own playground equipment have done so far a variety of reasons. Some build their own because they think it will cost less, and because they want to do something innovative with their playground. If material and most of the labor are donated, the cost can be minimal. The only costs might be for the materials, surfacing, props, fencing and storage shed. Sometimes a center decides they will have a more imaginative and inviting playground if they build it themselves. They believe that more opportunities for play could be provided with free-form equipment they could build. They also like the idea of the playground not being sterile and institutional looking. Equipment stained with wood colors (for

Cable spools can be used for a "taking-off" platform.

example, redwood) is attractive as well as complementary to the natural surroundings.

One of the biggest advantages in building one's own playground equipment is that it can be more responsive to a program's individual needs and capacities of particular ages, whereas manufactured equipment often comes one-size-fits-all. Hilly or sandy areas may pose problems for mounting some of the manufactured equipment, whereas homemade equipment can be built specifically for a particular slope or terrain.

The rewards of building one's own playground can be enormous. There is no substitute for the feeling of pride and accomplishment that most adults and children gain, however crude their playground may turn out to be. The opportunity to change or to have an effect on one's environment is an exhilarating experience and too often a rare one. The exercise in self-expression is valuable for both children and adults.

Centers dedicated to the idea that day care is for families and the community as well as the children have found that activities which involve parents and the community in an integral way demonstrate the sincerity of that commitment.

Although building your own playground equipment may be creative and provide a more personal touch, it may also be more of a headache. In both Tennessee and North Carolina, an enormous amount of planning time was necessary. In the long run, it probably took more time to complete the playground than to order and install ready-made equipment. It takes more time, commitment and skills for a do-it-yourself project to be successful. Materials and tools have to be rounded up. Manpower has to be recruited. It may even cost more money to hire someone to finish up the playground equipment if the interest and momentum die.

There are other practical disadvantages to consider. Wood is probably the most logical material to use. Donated wooden materials are usually of second-rate quality and have the disadvantage of needing to be treated or painted regularly. Edges and surfaces need to be smoothed to guard against splinters or rough areas. Bolts need to be properly mounted so as not to present a danger. Over a period of time, wood equipment needs to be repaired or replaced. Although it allows one to change or add new pieces with less trouble, it does not last as long as metal or tolerate as much wear and tear. On the other hand, if the parents and the community have a vested interest in the playground, upkeep or additions may not be a problem, but in fact may become an annual

Barrels can be versatile play equipment—a climber. . .

A make-believe bus . . .

A "horsey" to ride.

Some manufactured climbers have lasting play value.

"event." The children themselves can be involved in repairing the equipment.

In the end it is up to the people planning the playground to decide whether the benefits of innovation, flexibility and fringe benefits of children and parent involvement outweigh the problems of upkeep, having to replace equipment more often and the time and energy it takes to build your own.

Whether to buy or build may depend upon how much time one has before the playground is needed. The advantage of manufactured equipment is that it is already built and ready to use; however the time lapse between ordering certain equipment and how soon it is delivered and installed may vary from several weeks to months. With enough start-up time, though, it is usually possible t › order equipment that will arrive in time for the children. If children are already in a program, it may be more important to have something to play on immediately than have nothing until plans can be drawn up and a group organized to build a playground. Whatever the decision, it should fit into the overall long-range plan of the center.

If the playground planner has had good experience with certain types of equipment and knows the manufacturer to be reliable — and knows the children like the equipment — he may have good reason to decide on a manufactured piece of equipment. But sticking with the "tried and true" may eliminate other possibilities. A real effort should be made to look into all the various choices. For example, a slide may be a favorite, but one of the newer peices of equipment that combines a climbing apparatus and a slide or even a fireman's pole may give both the planner and the children more for their money.

Playground equipment is often a big item on the budget. Because of this, its permanence and durability must be considered. Manufactured equipment generally tends to be more permanent and more durable, needing very little, if any, upkeep. If vandalism is a problem, manufactured equipment has the advantage of being more difficult to destroy or steal (which is why most public parks use manufactured equipment).

Even though manufactured equipment is made in assembly-line style in large quantities, cost is often prohibitive. Price for one piece of equipment may range from $60 to $6,000. A ten-foot climb-around suitable for a day care program costs about $200. The cost of installation must also be considered. One center spent $248 for two spring toys and a sandbox, plus $81 for installation.

If a child comes from an environment of hand-me-down or make-do, at least one shiny piece of equipment may be very important to him, even if the novelty wears off quickly. Children like things that are "store-bought" and recognize them as new as opposed to homemade. Regular visits to other parks and playgrounds may be a better alternative, if costs are prohibitive.

Many centers have been happy with a combination of manufactured and homemade equipment. The manufactured, usually portable, equipment is used until other equipment can be built and even then is still used to add variety. In one case, the existing traditional playground was slowly dismantled and replaced by modern free-form equipment. In several cases the neighborhood public or school playground sufficed until the day care center could equip its own playground.

Permanent or Portable?

At one center, the balance beam and the teeter-totter could be moved or changed around, but someone had to be sure to put it away each night. At another, a beautiful tree house was built — but was too high for the teachers to reach a child in trouble. Nothing short of tearing down the whole thing could be done to correct this problem.

Whether equipment is manufactured or home-made, the decision must be made as to whether the equipment is to be installed and stationary, or portable and movable. The decision usually depends on the particular piece of equipment. (In one state, licensing standards require that all outdoor equipment be permanent.) Small pieces of equipment that are interchangeable and multi-purpose (Community Playthings makes such a line), can be used both indoors and out. The advantage of portable equipment is that it adds variety to both indoor and outdoor play areas, as well as stretching the budget. But someone must take the responsibility for moving the equipment in and out every day and keeping an eye on it outdoors as it can be easily dismantled or stolen.

Large pieces such as climbers, play houses, slides and swings are better installed permanently (some standards specify 18 inches deep) in order to make them more stable and prevent them from being carried away. The larger equipment is often light enough to carry but represents a sizeable investment that few day care programs could afford to lose. Spools can be grounded by running a pipe through the middle, platforms and climbers by burying the supports deep enough and using concrete.

Material and Storage

In deciding what material to use, factors such as climate and the possibility of vandalism should be considered. Wood does not wear as well as metal in climates with extreme temperatures or heavy rainfall. Metal becomes very hot in summer and cold in winter, besides tending to look institutional and sterile. Wood equipment is more easily vandalized. In several centers, wooden equipment was actually sawed in half. Metal is more durable, but not necessarily vandal-proof.

If a playground is to be well equipped with props, wheel toys, sand toys, etc., then a storage facility is a necessity. It should be accessible to both staff and children. Unless a storage room that opens up to the playground is part of the main building, a separate facility should be provided. Unfortunately, the storage unit is often the target of vandalism. In several cases, aluminum or wooden sheds were broken into or even carried off. One director solved this problem by having a shelter custom-built out of steel, set on concrete and made with continuous-weld seams. Initially, there was some fear that by making the shelter waterproof, it would also hold heat and be unbearable to go into during the day. They were also afraid of the possibility of a child getting locked in. By leaving the door open all day and carefully checking the inside before locking up, these fears proved to be unfounded.

A wooden treehouse must be designed to be strong and stable, not too high, and built so the tree is not damaged.

Factors to Consider in Choosing Equipment

Play Value – What play opportunities does it provide? Will it hold the child's interest? Is it challenging?

Flexibility — Can it be modified to meet changing needs?

Adaptability — How will it fit into the rest of the playground and the overall design? Does it present a space or flow problem? How will it fit into the long-range plan?

Cost — Can you afford it? Is it worth it?

Fringe Benefits — What other purposes will it serve? Will it satisfy other needs?

Effort — How much time and energy can you devote to building it and keeping it in good repair? How are your organizational skills?

Upkeep — Will it have to be repaired or replaced regularly? Who will do it?

Destructibility — Is it sturdy and durable? Does it have to be vandal-proof?

Do Children Like It? — (the acid test) Do the children use it? Do they continue to enjoy it over a period of time or does the novelty wear off?

On a well-designed playground a number of activities can take place simultaneously without interruptions or collisions.

THE ROLE OF THE ADULT ON THE PLAYGROUND

We plead for sensitive supervision of children because we have so often seen the boredom destructiveness, danger and abuse that emerge in its absence.—Jeannette Galambos Stone, *Play & Playgrounds*

In one center, staff members are encouraged to supervise play in two different ways. The director explains, "In some cases, the teacher participates in the activity; at other times she stays on the sidelines unless there is some reason she should intervene. It takes skill in knowing when a child needs and wants you, and when he wants you to stay out. For example, if some children are playing on the tires, pretending they are a ship, and another child wants to play but doesn't know how to enter into the play, the teacher will step in and maybe make a suggestion to introduce the child. She'll suggest he be the lookout or maybe a pirate. Given a concrete enough suggestion, the children usually pick up on the new roles you introduce and accept the child into their play world."

The child should be allowed to follow his own interests first, but adult intervention on the playground is extremely important because as one staff member puts it, "Children get stuck for ideas. They need experiences to teach them how to play." She suggests, "If children see something being done, they might imitate. Giving ideas by telling stories or building on other experiences, for example, providing hats and water hose after a trip to the fire station, can stimulate new games and help internalize learning." Another director adds, "The biggest problem we have is that not enough variety is introduced on the playground. We have unbelievable resources available, but the staff don't seem to take advantage of them. And we have excellent staff, too."

The problem is the difficulty in striking a balance between constantly being in the middle of the children's play and just keeping an eye on the children. (Children need time to themselves, too.)

A breather may be just as important for the staff as the fresh air and vigorous exercise are for the child, but most centers feel that a worker's break should be provided at a different time.

One reason for the confusion about the role of the adult is that traditionally outdoor play is "recess" and not considered to be part of the program. This is not the case in day care, and as one director concludes, "We finally have a good program outdoors, but that's only because we continue to work with the teachers." In-service training sessions on the role of the day care worker in outdoor play is one way of sensitizing staff to their role outdoors. One program went so far as to give staff "report cards" for their work outside and saw vast improvement.

Of late, there has been considerable discussion of the role of the adult in children's play. Some have described it as facilitating or stage-setting or simply listening. Bruce Gardner, a professor of child development, refers to the role of the adult as "going along with the play to get clarification, to get understanding, to gain appreciation for what cultural effects might be operating in a specific instance and to get a feel for what a child might be trying to express without interfering too much in the ongoingness of the play."[10]

Sarah Smilansky is the originator of the proposition that if you want children to play imaginatively, you should show them how by playing imaginatively with them. Her suggestions and conclusions about an adult's role apply to both indoor and outdoor play. She suggests that the first step is to leave the children alone and allow them to begin to do what they want, but when they repeat themselves over and again, or jump continuously from one activity to another or get stuck for something to do, then it is desirable to intervene, using suggestions, comments, demonstrations or other means as a stimulant. "In this way," Smilansky says, "the teacher encourages and enables the child to do what the child wants to do and does not leave the child alone to face the immense task of solving all the problems he encounters in his efforts at self-expression alone and unaided."[11]

In stimulating dramatic play outdoors as well as indoors, the first step is to provide plenty of props — steering wheel, fireman's hat, dress-up clothes, housekeeping equipment, etc. An adequate play space, clearly defined, encourages play. A playhouse or enclosed area sets the stage for dramatic play.

The day care worker plays an important role in facilitating good sand play. Her presence often changes the character of the play. Sand-throwing or tool-tossing is common but is minimized when an adult is providing direction to the play. She can structure what happens, give ideas or just make sure

Activities taken outdoors often need the sensitive leadership of an adult.

the sand is of the proper consistency for building. Discarded household utensils, plastic bottles and cans are ideal for sand play.

When it comes to water play, there is both structured and unstructured play, just as there is in sand play. In structured play, a staff member is there to ask questions or to stimulate new activities. Large tubs or buckets are often used with props such as measuring cups, bottles, paint brushes, scoops and straws. In unstructured water play, a wading pool or sprinkler is set up. Children do not need to be told what to do, although supervision is desirable particularly when the surrounding area gets wet and slippery. It is possible to combine both types of play. For instance, children can use the hose and carry buckets of water to fill a pool, or they can sit in a pool and play with water toys or props.

In warm weather, activities can be moved outside. Activities can be organized around special interest centers: painting, carpentry, clay, sand and water. A staff member may stimulate and encourage an activity, but the child may move from activity to activity. Art activities and carpentry often need some sort of supervision, although in one center the children are given buckets of water-based paint and big brushes and are permitted to paint whatever they please. In another center, a cement wall is regularly covered with a mural painted by the children using tempera paint. When it rains, the mural is washed away and the children start a new "master-piece."

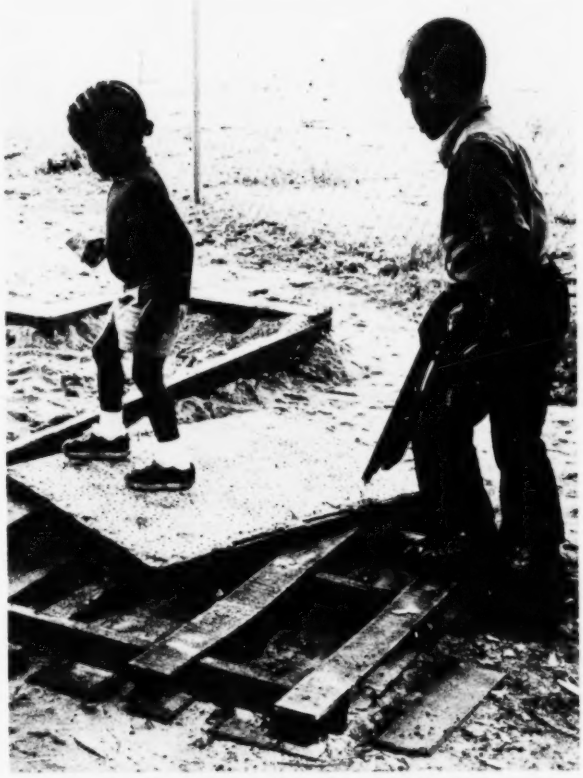
There is convincing evidence that the human element is the determining factor as to whether the playground works or not and that a good teacher is vital to both the indoor and outdoor program. Sensitive, imaginative teachers are not always easy to find. As one director sums it up, "It is no easy task to keep young children challenged and stimulated while at the same time insuring their sense of well-being. We need teachers who can do this as well as bring a wealth of enthusiasm and energy to the playground."

If the adult provides enough props, children never run out of things to do.

A PLAYGROUND SHOULD NOT HAVE . . .

Splintered wood and a missing rung are dangers to an unsuspecting child.

Trash and poor drainage combine to make the area unusable.



Exposed nails and loose debris are hazards, not adventures.

NOTES

1. The Southeastern Day Care Project is a demonstration project funded by grants from the Donner Foundation and Title IV-A of the Social Security Amendments of 1967. The program was carried on in the eight states of HEW Region IV (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina and Tennessee.) The Southern Regional Education Board coordinated the project and provided training, assistance and evaluation of the program over the three-year period of the project.

2. The Advisory for Open Education publishes two such booklets: "Building a Playground," a booklet describing the making of a community-built playground. Includes plans, materials list, and photographs. "Building with Tires," suggestions for using tires as play equipment. Includes photos and drawings showing techniques for joining and suspending tires. Advisory for Open Education, 90 Sherman Street, Cambridge, Mass. 02140. Prepayment required.

3. Kritchevsky, Sybil, and Prescott, Elizabeth, *Planning Environment for Young Children: Physical Space,* (National Association for the Education of Young Children, Washington, D.C., pg. 10, 1969).

4. Ibid., pg. 17.

5. The Pacific Oaks faculty conducted research to increase knowledge about programs for children in day care centers, and especially to examine factors which might be predictive of differences in program quality which could serve as guides in the improvement of programs for groups of young children. The research was funded by the U.S. Children's Bureau, Social Security Administration, Department of Health, Education, and Welfare (1967).

6. Osmon, Fred L., *Patterns for Designing Children's Centers,* Educational Facilities Laboratories, Inc., New York, pg. 113.

7. Friedberg, Paul M., *Play and Interplay: A Manifesto for New Design in Urban Recreational Environment,* pg. 58.

8. Ibid., pg. 110.

9. Ibid., pg. 112.

10. *Play: The Child Strives Toward Self-Realization,* National Association for the Education of Young Children, Washington, D.C., 1971, pg. 58.

11. Ibid., pg. 46.

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